

CLAIMS

1. A compressor characterized in that a nonpolar refrigerant is used as a working fluid and an insulation part of a rotating section is formed from a low dielectric constant plastic film having a specific dielectric constant of 1.2 to 3.0.

2. The compressor in accordance with claim 1, wherein said nonpolar refrigerant contains at least one of propane and isobutane.

3. The compressor in accordance with claim 1, wherein said nonpolar refrigerant is carbon dioxide.

4. The compressor in accordance with claim 1, wherein said working fluid contains a nonpolar oil as a lubricating oil.

5. The compressor in accordance with claim 4, wherein said nonpolar oil is a mineral oil.

6. The compressor in accordance with claim 1, wherein said low dielectric constant plastic film is a polyester film having pores therein.

7. The compressor in accordance with claim 6, wherein said film has a pore volume ratio of 10 to 95 vol%.

8. The compressor in accordance with claim 7, wherein said pores have a mean pore size of 0.1 to 10 μm .

9. The compressor in accordance with claim 1, wherein said low dielectric constant plastic film is a

fluorocarbon resin film.

10. The compressor in accordance with claim 6, wherein said low dielectric constant plastic film is a laminated composite film comprising a base film having a low dielectric constant and an auxiliary film having a higher dielectric constant than said base film.

11. The compressor in accordance with claim 6, wherein said low dielectric constant plastic film has a specific dielectric constant of 2.0 to 2.8.

12. The compressor in accordance with claim 1, wherein said low dielectric constant plastic film forms at an iron core of said rotating section, an insulation part for insulating a field coil and a slot.

13. A refrigerant system device comprising the compressor in accordance with claim 1.